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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,418	11/28/2003	David D. Bohn	003797.00688	7390

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/722,418	Applicant(s) BOHN ET AL.	
	Examiner Jennifer T. Nguyen	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/8/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is responsive to amendment filed on 1/8/07.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 29 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Nevermann (Patent No. US 6,921,170).

Regarding claim 29, Nevermann teaches a method of notifying a user of an occurrence via a computer peripheral device configured to project images, the method including the steps of:

projecting a first image (i.e., projecting the same image with the image on the integrated display of device 1) onto a display region (2); and

upon a predetermined condition associated with a computer program, projecting a second image (i.e., projecting the image transmitted by the interlocutor), different from the first image, onto the display region (col. 6, lines 9-32).

Regarding claim 30, Nevermann teaches the display region is in an area adjacent a housing periphery of the computer peripheral device such that the projecting steps include projecting the first and second images onto a supporting surface adjacent the housing periphery (col. 5, lines 15-67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 9, 11, 12, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevermann (Patent No. US 6,921,170) in view of Liess et al. (Patent No. US 6,707,027).

Regarding claim 1, Nevermann teaches a small-scale device (mobile telephone 1, figs. 1 and 2) configured to rest on a supporting surface (24), comprising:

a housing (10) having a lower periphery (i.e., lower part of the device); and
an image projection system (fig. 3) configured to display an image on the supporting surface (24) adjacent to, outside of, and away from the lower periphery of the device when the device is resting on the supporting surface (col. 3, lines 52-67, col. 5, line 58 to col. 6, line 3).

Nevermann differs from claim 1 in that he does not specifically teach the mobile telephone is a computer input device.

However, Liess teaches a mobile telephone is a computer input device (fig. 12, col. 15, lines 1-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the computer input device as taught by Liess in the system of Nevermann in order to allow the device can be used as a terminal for worldwide communication network.

Regarding claim 2, Nevermann teaches the image projection system is substantially contained within the housing (figs. 3 and 4).

Regarding claims 9 and 11, the combination of Nevermann and Liess teaches the computer input device is a mouse (col. 6, lines 60-64 of Liess).

Regarding claim 12, Nevermann teaches the image includes an edge adjacent to the lower periphery, and wherein the image projection system is configured and oriented so that the adjacent edge of the image is within 1 mm and 25 mm from the lower periphery (fig. 3).

Regarding claim 17, the combination of Nevermann and Liess teaches computer input device is a pointing device (fig. 18 of Liess).

Regarding claim 18, the combination of Nevermann and Liess teaches computer input device includes a motion detecting system (col. 7, line 50 to col. 8, line 16 of Liess).

Regarding claim 19, Nevermann teaches an aperture (22) in the housing, and wherein an optical path defined between a light source and the displayed image extends through the aperture (col. 5, lines 62-67).

6. Claims 3-8, 13-16, and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevermann (Patent No. US 6,921,170) in view of Parks et al. (Patent No. US 5,526,481) and further in view of Liu (Patent No. US 6,133,907).

Regarding claim 3, the combination of Nevermann and Parks teaches the image projection system includes a light source (3) and a lens (12) (fig. 3, col. 5, lines 33-67 of Nevermann).

The combination of Nevermann and Parks differs from claim 3 in that it does not specifically teach a light blocker having a light transmissive portion and a light blocking portion

Liu teaches a light blocker (23, fig. 2) having a light transmissive portion and a light blocking portion (col. 2, lines 22-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the light blocker as taught by Liu in the system of the combination of Nevermann and Parks in order to provide pointing device with different purposes, for example, for advertisements or purposes of fashion.

Regarding claim 4, Nevermann further teaches the image projection system further includes a mirror (15, fig. 3) disposed in a light path between the light source and the displayed image.

Regarding claims 5, 7-8, and 26, the combination of Nevermann, Parks, and Liu teaches the light blocker (23) is optically located between the light source (24) and the lens (16) (fig. 2 of Liu).

Regarding claim 6, Nevermann further teaches the lens (12) creates a focal point for the displayed image located substantially on the supporting surface (col. 5, lines 58-67).

Regarding claim 13, the combination of Nevermann, Parks, and Liu teaches multiple predetermined image forming devices disposed within the housing, each image forming device producing a different displayed image (col. 2, lines 22-39 of Liu).

Regarding claims 14-16, the combination of Nevermann, Parks, and Liu teaches comprising a device (21 and 22) for moving the image forming devices relative to an optical path (col. 2, lines 22-39 of Liu).

Regarding claim 20, the combination of Nevermann, Parks, and Liu teaches the image projection system includes a laser (col. 2, lines 22-40 of Liu).

Regarding claims 21-23, the combination of Nevermann, Parks, and Liu teaches the computer input device is packaged as a kit with multiple replaceable image forming devices (col. 2, lines 22-40 of Liu).

Regarding claim 24, Nevermann teaches a small-scale device (i.e., a PDA 1, fig. 3) comprising:

- a housing (fig. 3);

- a plurality of actuators (inherent in 1); and

- an optical projection system including a light source (3) located within the housing (col. 4, lines 4-12, col. 5, lines 15-26).

Nevermann differs from claim 24 in that he does not specifically teach the device is a mouse has a motion detecting system for determining relative movement of the mouse.

Parks teaches a PDA is a mouse has a motion detecting system for determining relative movement of the mouse (figs. 1 and 2, col. 3, lines 50-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the integrated mouse and PDA as taught by Parks in the system of Nevermann in order to provide a device is capable of performing different functions quickly and conveniently.

The combination of Nevermann and Parks differs from claim 24 in that it does not specifically teach a movable image forming element located within the housing.

Liu teaches a movable image forming element located within the housing (col. 2, lines 22-39 of Liu). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the movable image forming element as taught by Liu in the system of the combination of Nevermann and Parks in order to provide a device which

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projects variety of images or logos for different purposes, for example, for advertisements or purposes of fashion.

Regarding claim 25, the combination of Nevermann, Parks, and Liu teaches the mouse is configured to rest on a supporting surface and the optical projection system is configured to project an image onto the supporting surface (col. 5, lines 58-67 of Nevermann).

7. Claims 10 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevermann (Patent No. US 6,921,170), Parks et al. (Patent No. US 5,526,481) in view of Liu (Patent No. US 6,133,907), and further in view of Wu (Patent No. 6,882,331).

Regarding of claims 10 and 27-28, the combination of Nevermann, Parks, and Liu differs from claims 10 and 27-28 in that it does not specifically teach the image projecting system includes an active LED matrix.

Wu teaches an image projecting system includes an active LED matrix (col. 2, lines 40-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the LED matrix as taught by Wu in the system of the combination of Nevermann, Parks, and Liu in order to provide a projecting system with low energy consumption.

8. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer T. Nguyen whose telephone number is 571-272-7696. The examiner can normally be reached on Mon-Fri: 9:00am-5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Nguyen
3/30/07



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